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No-Tillage Weed Control in Corn I Valent, DOW, Dupont, Cheminova

Trial ID: 14NTC1 Location: Trial Year: 2014
 Protocol ID: 14NTC1 Investigator: Dr. Mark M. Loux
 Project ID: Study Director: Anthony Dobbels
 Sponsor Contact: Various

Crop 1: ZEAMX Zea mays	Crop Description
Variety: Seed Consultants SC 11HR12	Corn
	BBCH Scale: BCOR
Planting Rate, Unit: 32097 S/A	Planting Date: May-4-2014
Depth, Unit: 1.75 IN	Planting Method: SEEDED seeded
Row Spacing, Unit: 30 IN	Planting Equipment: FPP Finger Pickup Planter
Soil Temperature, Unit: 58 F	Emergence Date: May-19-2014
Soil Moisture: GOOD good	
Seed Bed: MEDTRA medium/trashy	

Pest Description

Pest 1 Type: W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed

Pest 2 Type: W **Code:** LAMPU Lamium purpureum
Common Name: Purple deadnettel

Pest 3 Type: W **Code:** LAMAM Lamium amplexicaule
Common Name: Henbit

Pest 4 Type: W **Code:** STEME Stellaria media
Common Name: Common chickweed

Pest 5 Type: W **Code:** VERAG Veronica agrestis
Common Name: Field speedwell

Pest 6 Type: W **Code:** TAROF Taraxacum officinale
Common Name: Common dandelion

Pest 7 Type: W **Code:** ERICA Conyza canadensis
Common Name: Canada horseweed

Pest 8 Type: W **Code:** ERPSS Erophila sp.
Common Name: Whitlowgrass

Pest 9 Type: W **Code:** SETFA Setaria faberi
Common Name: Giant foxtail

Site and Design

Treated Plot Width: 6.67 FT	Site Type: FIELD field
Treated Plot Length: 30 FT	Experimental Unit: 1 PLOT plot
Treated Plot Area: 200.1 FT ²	Tillage Type: NOTILL no-till
Replications: 3	Study Design: RACOB Randomized Complete Block (RCB)
Treatments: 12	

No. Previous Crop Year
 1. Soybean 2013

Soil Description

Description Name: F-9 East	Texture: SICL silty clay loam
% OM: 2.8	Soil Name: Kokomo
pH: 6.4	Fert. Level: G good
CEC: 19.6	Soil Drainage: G good

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Application Description

	A	B
Application Date:	Apr-24-2014	Jun-9-2014
Appl. Start Time:	9:00 AM	9:00 AM
Appl. Stop Time:	9:30 AM	9:30 AM
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	POST
Application Placement:	BROSOIL	BROFOL
Applied By:	Dobbels	Bethel
Air Temperature, Unit:	48.5 F	63 F
% Relative Humidity:	45	74.5
Wind Velocity, Unit:	7 MPH	1.5 MPH
Wind Direction:	E	NNE
Dew Presence (Y/N):	N no	Y yes
Soil Temperature, Unit:	50 F	62 F
Soil Moisture:	MOIST	MOIST
% Cloud Cover:	20	65
Next Moisture Occurred On:	Apr-25-2014	Jun-10-2014
Time to Next Moisture, Unit:	1 DAY	1 DAY

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		16
Height, Unit:		20 IN

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	AMBTR W	AMBTR W
Stage Majority, Percent:	12 100	16 100
Height, Unit:	1 IN	7.5 IN
Height Minimum, Maximum:	1 1	6 9
Density, Unit:	16.33 M2	6 m2
Pest 2 Code, Type, Scale:	LAMPU W	LAMPU W
Stage Majority, Percent:	14 100	
Stage Minimum, Percent:	14 80	
Stage Maximum, Percent:	18 20	
Height, Unit:	2 IN	
Height Minimum, Maximum:	2 4	
Density, Unit:	9 M2	
Pest 3 Code, Type, Scale:	LAMAM W	LAMAM W
Stage Majority, Percent:	14 80	
Stage Minimum, Percent:	14 80	
Stage Maximum, Percent:	18 20	
Height, Unit:	2 IN	
Height Minimum, Maximum:	2 4	
Density, Unit:	0.33 M2	
Pest 4 Code, Type, Scale:	STEME W	STEME W
Stage Majority, Percent:	19 100	
Height, Unit:	2 IN	
Height Minimum, Maximum:	2 4	
Density, Unit:	3.66 M2	
Pest 5 Code, Type, Scale:	VERAG W	VERAG W
Stage Majority, Percent:	19 100	
Height, Unit:	2 IN	
Height Minimum, Maximum:	2 4	
Density, Unit:	1.33 M2	
Pest 6 Code, Type, Scale:	TAROF W	TAROF W
Stage Majority, Percent:	16 80	
Stage Minimum, Percent:	16 80	
Stage Maximum, Percent:	18 20	
Height, Unit:	2 IN	
Height Minimum, Maximum:	2 4	
Density, Unit:	1 M2	
Pest 7 Code, Type, Scale:	ERICA W	ERICA W
Stage Majority, Percent:	19 100	
Height, Unit:	2 IN	
Height Minimum, Maximum:	2 4	
Density, Unit:	0.66 M2	
Pest 8 Code, Type, Scale:	ERPSS W	ERPSS W
Stage Majority, Percent:	19 100	
Height, Unit:	1 IN	
Height Minimum, Maximum:	1 2	
Density, Unit:	1.33 M2	
Pest 9 Code, Type, Scale:	SETFA W	SETFA W
Stage Majority, Percent:		13 100
Height, Unit:		4 IN
Height Minimum, Maximum:		2 6
Density, Unit:		80 M2

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Application Equipment

	A	B
Appl. Equipment:	6 FOOT BOOM	6 FOOT BOOM
Equipment Type:	SPRBAC	SPRBAC
Operation Pressure, Unit:	46 PSI	46 PSI
Nozzle Type:	AI XR	AI XR
Nozzle Size:	110015	110015
Nozzle Spacing, Unit:	18 IN	18 IN
Boom Length, Unit:	10 FT	6.67 FT
Boom Height, Unit:	20 IN	20 IN
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA
Mix Size, Unit:	1 Liters	1 Liters
Propellant:	CO2	CO2

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Trial ID: 14NTC1 Location: Trial Year: 2014
 Protocol ID: 14NTC1 Investigator: Dr. Mark M. Loux
 Project ID: Study Director: Anthony Dobbels
 Sponsor Contact: Various

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMPU	VERAR	AMBTR
Pest Scientific Name	Stellaria media	Lamium purpure>	Veronica arven>	Ambrosia trifi>
Pest Name	Common chickwe>	Purple deadnet>	Corn speedwell	Giant ragweed
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date	May-1-2014	May-1-2014	May-1-2014	May-1-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
SE Group No.	1	2	3	4
Days After First/Last Applic.	7 7	7 7	7 7	7 7
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A
Plant-Eval Interval	-3 DP-1	-3 DP-1	-3 DP-1	-3 DP-1
Days After Emergence	-18 DE-1	-18 DE-1	-18 DE-1	-18 DE-1
ARM Action Codes	AA			
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	1	2	3	4
1	Surestart II	1.56 lb ai/a		3 pt/a		A	22	37	13	37
1	Durango DMA	0.75 lb ae/a		1.5 pt/a		A				
1	2,4-D Amine	0.5 lb ai/a		1 pt/a		A				
1	N PAK AMS	2.5 % v/v		1.5 qt/a		A				
1	Durango DMA	0.75 lb ae/a		1.5 pt/a		B				
1	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
2	Surestart II	1.56 lb ai/a		3 pt/a		A	26	43	40	43
2	Atrazine	1 lb ai/a		1 qt/a		A				
2	Durango DMA	0.75 lb ae/a		1.5 pt/a		A				
2	2,4-D Amine	0.5 lb ai/a		1 pt/a		A				
2	N PAK AMS	2.5 % v/v		1.5 qt/a		A				
2	Durango DMA	0.75 lb ae/a		1.5 pt/a		B				
2	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
3	Roundup PowerMax	0.77 lb ae/a		22 oz/a		A	59	63	43	47
3	Clarity	0.25 lb ai/a		8 oz/a		A				
3	Fierce	0.143 lb ai/a		3 oz/a		A				
3	N PAK AMS	2.5 % v/v		1.5 qt/a		A				
3	Roundup PowerMax	0.77 lb ae/a		22 oz/a		B				
3	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
4	Roundup PowerMax	0.77 lb ae/a		22 oz/a		A	74	78	55	73
4	Clarity	0.25 lb ai/a		8 oz/a		A				
4	Fierce	0.143 lb ai/a		3 oz/a		A				
4	AAtrex	1 lb ai/a		1 qt/a		A				
4	N PAK AMS	2.5 % v/v		1.5 qt/a		A				
4	Roundup PowerMax	0.77 lb ae/a		22 oz/a		B				
4	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
5	Roundup PowerMax	0.77 lb ae/a		22 oz/a		A	27	30	27	40
5	Clarity	0.25 lb ai/a		8 oz/a		A				
5	Harness Xtra 5.6	2.45 lb ai/a		3.5 pt/a		A				
5	N PAK AMS	2.5 % v/v		1.5 qt/a		A				
5	Roundup PowerMax	0.77 lb ae/a		22 oz/a		B				
5	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
6	Harrow	0.0234 lb ai/a		0.5 oz/a		A	13	17	7	23
6	Glyphos Xtra	0.75 lb ae/a		32 oz/a		A				
6	NIS	0.25 % v/v		4.8 oz/a		A				

t=Mean descriptions are reported in transformed data units, and are not de-transformed.

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Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMPU	VERAR	AMBTR
Pest Scientific Name	Stellaria media	Lamium purpure>	Veronica arven>	Ambrosia trifi>
Pest Name	Common chickwe>	Purple deadnet>	Corn speedwell	Giant ragweed
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date	May-1-2014	May-1-2014	May-1-2014	May-1-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
SE Group No.	1	2	3	4
Days After First/Last Applic.	7 7	7 7	7 7	7 7
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A
Plant-Eval Interval	-3 DP-1	-3 DP-1	-3 DP-1	-3 DP-1
Days After Emergence	-18 DE-1	-18 DE-1	-18 DE-1	-18 DE-1
ARM Action Codes	AA			
Number of Decimals	0	0	0	0

Trt Treatment No. Name	Rate	Other Rate	Other Rate	Appl Unit Code	1	2	3	4
7 Basis	0.0234 lb ai/a	0.5 oz/a		A	17	18	10	27
7 Glyphos Xtra	0.75 lb ae/a	32 oz/a		A				
7 NIS	0.25 % v/v	4.8 oz/a		A				
8 Instigate 6 oz					9	27	23	30
8 Rimsulfuron	0.25 oz ai/a	1 oz/a		A				
8 Mesotrione	2.5 oz ai/a	5 oz/a		A				
8 Atrazine	1.5 lb ai/a	1.5 qt/a		A				
8 COC	1 % v/v	0.6 qt/a		A				
8 Abundit Extra	0.75 lb ae/a	32 oz/a		B				
8 N PAK AMS	2.5 % v/v	1.5 qt/a		B				
9 Instigate 6 oz					43	65	50	53
9 Rimsulfuron	0.25 oz ai/a	1 oz/a		A				
9 Mesotrione	2.5 oz ai/a	5 oz/a		A				
9 Atrazine	1.5 lb ai/a	1.5 qt/a		A				
9 2,4-D Ester	0.5 lb ai/a	1 pt/a		A				
9 COC	1 % v/v	0.6 qt/a		A				
9 Abundit Extra	0.75 lb ae/a	32 oz/a		B				
9 N PAK AMS	2.5 % v/v	1.5 qt/a		B				
10 Instigate 5.25 oz					11	23	38	37
10 Rimsulfuron	0.218 oz ai/a	0.87 oz/a		A				
10 Mesotrione	2.18 oz ai/a	4.36 oz/a		A				
10 Cinch ATZ	2.75 lb ai/a	2 qt/a		A				
10 COC	1 % v/v	0.6 qt/a		A				
10 Abundit Extra	0.75 lb ae/a	32 oz/a		B				
10 N PAK AMS	2.5 % v/v	1.5 qt/a		B				
11 Instigate 5.25 oz					22	48	43	50
11 Rimsulfuron	0.218 oz ai/a	0.87 oz/a		A				
11 Mesotrione	2.18 oz ai/a	4.36 oz/a		A				
11 Cinch ATZ	2.75 lb ai/a	2 qt/a		A				
11 2,4-D Ester	0.5 lb ai/a	1 pt/a		A				
11 COC	1 % v/v	0.6 qt/a		A				
11 Abundit Extra	0.75 lb ae/a	32 oz/a		B				
11 N PAK AMS	2.5 % v/v	1.5 qt/a		B				
12 UTC					0	0	0	0
LSD (P=.05)					18.5t	20.7	27.1	20.2
Standard Deviation					10.9t	12.2	16.0	11.9
CV					37.38	32.6	54.96	31.05
Bartlett's X2					7.321	7.905	4.182	4.421
P(Bartlett's X2)					0.695	0.638	0.939	0.882
Skewness					0.0599	0.3447	0.17	-0.1397
Kurtosis					-0.2883	-0.8829	-1.0846	-0.0953
Replicate F					0.108	1.046	0.608	0.765
Replicate Prob(F)					0.8984	0.3683	0.5534	0.4774
Treatment F					6.121	10.631	3.947	6.909
Treatment Prob(F)					0.0002	0.0001	0.0030	0.0001

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Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	5	6	7	8
1	Surestart II	1.56 lb ai/a		3 pt/a		A	37	0	96	95
1	Durango DMA	0.75 lb ae/a		1.5 pt/a		A				
1	2,4-D Amine	0.5 lb ai/a		1 pt/a		A				
1	N PAK AMS	2.5 % v/v		1.5 qt/a		A				
1	Durango DMA	0.75 lb ae/a		1.5 pt/a		B				
1	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
2	Surestart II	1.56 lb ai/a		3 pt/a		A	40	0	97	100
2	Atrazine	1 lb ai/a		1 qt/a		A				
2	Durango DMA	0.75 lb ae/a		1.5 pt/a		A				
2	2,4-D Amine	0.5 lb ai/a		1 pt/a		A				
2	N PAK AMS	2.5 % v/v		1.5 qt/a		A				
2	Durango DMA	0.75 lb ae/a		1.5 pt/a		B				
2	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
3	Roundup PowerMax	0.77 lb ae/a		22 oz/a		A	40	0	100	100
3	Clarity	0.25 lb ai/a		8 oz/a		A				
3	Fierce	0.143 lb ai/a		3 oz/a		A				
3	N PAK AMS	2.5 % v/v		1.5 qt/a		A				
3	Roundup PowerMax	0.77 lb ae/a		22 oz/a		B				
3	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
4	Roundup PowerMax	0.77 lb ae/a		22 oz/a		A	67	0	100	100
4	Clarity	0.25 lb ai/a		8 oz/a		A				
4	Fierce	0.143 lb ai/a		3 oz/a		A				
4	AAtrex	1 lb ai/a		1 qt/a		A				
4	N PAK AMS	2.5 % v/v		1.5 qt/a		A				
4	Roundup PowerMax	0.77 lb ae/a		22 oz/a		B				
4	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
5	Roundup PowerMax	0.77 lb ae/a		22 oz/a		A	33	0	93	100
5	Clarity	0.25 lb ai/a		8 oz/a		A				
5	Harness Xtra 5.6	2.45 lb ai/a		3.5 pt/a		A				
5	N PAK AMS	2.5 % v/v		1.5 qt/a		A				
5	Roundup PowerMax	0.77 lb ae/a		22 oz/a		B				
5	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
6	Harrow	0.0234 lb ai/a		0.5 oz/a		A	23	0	97	67
6	Glyphos Xtra	0.75 lb ae/a		32 oz/a		A				
6	NIS	0.25 % v/v		4.8 oz/a		A				

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Pest Type	W Weed	W Weed	W Weed
Pest Code	RANAB	STEME	LAMPU
Pest Scientific Name	Ranunculus abo>	Stellaria media	Lamium purpure>
Pest Name	Smallflower bu>	Common chickwe>	Purple deadnet>
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Rating Date	May-1-2014	May-16-2014	May-16-2014
Rating Type	CONTRO	PHYGEN	CONTRO
Rating Unit	%	%	%
Number of Subsamples	1	1	1
SE Group No.	5	11	6
Days After First/Last Applic.	7 7	22 22	22 22
Trt-Eval Interval	7 DA-A	22 DA-A	22 DA-A
Plant-Eval Interval	-3 DP-1	12 DP-1	12 DP-1
Days After Emergence	-18 DE-1	-3 DE-1	-3 DE-1
ARM Action Codes			
Number of Decimals	0	0	0

Trt Treatment No. Name	Rate	Other Rate	Other Rate	Appl Code	5	6	7	8
7 Basis	0.0234 lb ai/a	0.5 oz/a		A	27	0	95	63
7 Glyphos Xtra	0.75 lb ae/a	32 oz/a		A				
7 NIS	0.25 % v/v	4.8 oz/a		A				
8 Instigate 6 oz					30	0	100	100
8 Rimsulfuron	0.25 oz ai/a	1 oz/a		A				
8 Mesotrione	2.5 oz ai/a	5 oz/a		A				
8 Atrazine	1.5 lb ai/a	1.5 qt/a		A				
8 COC	1 % v/v	0.6 qt/a		A				
8 Abundit Extra	0.75 lb ae/a	32 oz/a		B				
8 N PAK AMS	2.5 % v/v	1.5 qt/a		B				
9 Instigate 6 oz					53	0	100	100
9 Rimsulfuron	0.25 oz ai/a	1 oz/a		A				
9 Mesotrione	2.5 oz ai/a	5 oz/a		A				
9 Atrazine	1.5 lb ai/a	1.5 qt/a		A				
9 2,4-D Ester	0.5 lb ai/a	1 pt/a		A				
9 COC	1 % v/v	0.6 qt/a		A				
9 Abundit Extra	0.75 lb ae/a	32 oz/a		B				
9 N PAK AMS	2.5 % v/v	1.5 qt/a		B				
10 Instigate 5.25 oz					37	0	100	100
10 Rimsulfuron	0.218 oz ai/a	0.87 oz/a		A				
10 Mesotrione	2.18 oz ai/a	4.36 oz/a		A				
10 Cinch ATZ	2.75 lb ai/a	2 qt/a		A				
10 COC	1 % v/v	0.6 qt/a		A				
10 Abundit Extra	0.75 lb ae/a	32 oz/a		B				
10 N PAK AMS	2.5 % v/v	1.5 qt/a		B				
11 Instigate 5.25 oz					47	0	100	100
11 Rimsulfuron	0.218 oz ai/a	0.87 oz/a		A				
11 Mesotrione	2.18 oz ai/a	4.36 oz/a		A				
11 Cinch ATZ	2.75 lb ai/a	2 qt/a		A				
11 2,4-D Ester	0.5 lb ai/a	1 pt/a		A				
11 COC	1 % v/v	0.6 qt/a		A				
11 Abundit Extra	0.75 lb ae/a	32 oz/a		B				
11 N PAK AMS	2.5 % v/v	1.5 qt/a		B				
12 UTC					0	0	0	0
LSD (P=.05)					20.2	0.0	8.7	7.2
Standard Deviation					11.9	0.0	5.1	4.2
CV					33.02	0.0	5.73	4.97
Bartlett's X2					6.931	0.0	9.401	0.868
P(Bartlett's X2)					0.732	.	0.094	0.648
Skewness					-0.221	.	-2.9974*	-2.2106*
Kurtosis					-0.1669	.	7.713*	4.0986*
Replicate F					2.130	0.000	0.471	2.432
Replicate Prob(F)					0.1427	1.0000	0.6308	0.1112
Treatment F					5.705	0.000	91.312	150.495
Treatment Prob(F)					0.0003	1.0000	0.0001	0.0001

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Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Unit	Appl Code	9	10	11	12	13
1	Surestart II	1.56 lb ai/a		3 pt/a		A	70	88	100	0	99
1	Durango DMA	0.75 lb ae/a		1.5 pt/a		A					
1	2,4-D Amine	0.5 lb ai/a		1 pt/a		A					
1	N PAK AMS	2.5 % v/v		1.5 qt/a		A					
1	Durango DMA	0.75 lb ae/a		1.5 pt/a		B					
1	N PAK AMS	2.5 % v/v		1.5 qt/a		B					
2	Surestart II	1.56 lb ai/a		3 pt/a		A	100	90	100	0	100
2	Atrazine	1 lb ai/a		1 qt/a		A					
2	Durango DMA	0.75 lb ae/a		1.5 pt/a		A					
2	2,4-D Amine	0.5 lb ai/a		1 pt/a		A					
2	N PAK AMS	2.5 % v/v		1.5 qt/a		A					
2	Durango DMA	0.75 lb ae/a		1.5 pt/a		B					
2	N PAK AMS	2.5 % v/v		1.5 qt/a		B					
3	Roundup PowerMax	0.77 lb ae/a		22 oz/a		A	100	90	97	0	100
3	Clarity	0.25 lb ai/a		8 oz/a		A					
3	Fierce	0.143 lb ai/a		3 oz/a		A					
3	N PAK AMS	2.5 % v/v		1.5 qt/a		A					
3	Roundup PowerMax	0.77 lb ae/a		22 oz/a		B					
3	N PAK AMS	2.5 % v/v		1.5 qt/a		B					
4	Roundup PowerMax	0.77 lb ae/a		22 oz/a		A	100	88	100	0	99
4	Clarity	0.25 lb ai/a		8 oz/a		A					
4	Fierce	0.143 lb ai/a		3 oz/a		A					
4	AAtrex	1 lb ai/a		1 qt/a		A					
4	N PAK AMS	2.5 % v/v		1.5 qt/a		A					
4	Roundup PowerMax	0.77 lb ae/a		22 oz/a		B					
4	N PAK AMS	2.5 % v/v		1.5 qt/a		B					
5	Roundup PowerMax	0.77 lb ae/a		22 oz/a		A	100	82	83	0	100
5	Clarity	0.25 lb ai/a		8 oz/a		A					
5	Harness Xtra 5.6	2.45 lb ai/a		3.5 pt/a		A					
5	N PAK AMS	2.5 % v/v		1.5 qt/a		A					
5	Roundup PowerMax	0.77 lb ae/a		22 oz/a		B					
5	N PAK AMS	2.5 % v/v		1.5 qt/a		B					
6	Harrow	0.0234 lb ai/a		0.5 oz/a		A	67	85	100	0	100
6	Glyphos Xtra	0.75 lb ae/a		32 oz/a		A					
6	NIS	0.25 % v/v		4.8 oz/a		A					

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Pest Type	W Weed	W Weed	W Weed	W Weed	
Pest Code	VERAR	AMBTR	RANAB	SETFA	
Pest Scientific Name	Veronica arven>	Ambrosia trifi>	Ranunculus abo>	Setaria faberi	
Pest Name	Corn speedwell	Giant ragweed	Smallflower bu>	Giant foxtail	
Crop Code				ZEAMX	
BBCH Scale				BCOR	
Crop Scientific Name				Zea mays	
Crop Name				Corn	
Rating Date	May-16-2014	May-16-2014	May-16-2014	May-29-2014	May-29-2014
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
SE Group No.	8	9	10	12	13
Days After First/Last Applic.	22 22	22 22	22 22	35 35	35 35
Trt-Eval Interval	22 DA-A	22 DA-A	22 DA-A	36 DA-A	36 DA-A
Plant-Eval Interval	12 DP-1	12 DP-1	12 DP-1	25 DP-1	25 DP-1
Days After Emergence	-3 DE-1	-3 DE-1	-3 DE-1	10 DE-1	10 DE-1
ARM Action Codes		ET12	AA		AA
Number of Decimals	0	0	0	0	0

Trt Treatment No. Name	Rate	Other Rate	Other Rate	Appl Unit	Code	9	10	11	12	13
7 Basis	0.0234 lb ai/a	0.5 oz/a			A	57	80	96	0	86
7 Glyphos Xtra	0.75 lb ae/a	32 oz/a			A					
7 NIS	0.25 % v/v	4.8 oz/a			A					
8 Instigate 6 oz						100	93	100	0	100
8 Rimsulfuron	0.25 oz ai/a	1 oz/a			A					
8 Mesotrione	2.5 oz ai/a	5 oz/a			A					
8 Atrazine	1.5 lb ai/a	1.5 qt/a			A					
8 COC	1 % v/v	0.6 qt/a			A					
8 Abundit Extra	0.75 lb ae/a	32 oz/a			B					
8 N PAK AMS	2.5 % v/v	1.5 qt/a			B					
9 Instigate 6 oz						100	93	100	0	100
9 Rimsulfuron	0.25 oz ai/a	1 oz/a			A					
9 Mesotrione	2.5 oz ai/a	5 oz/a			A					
9 Atrazine	1.5 lb ai/a	1.5 qt/a			A					
9 2,4-D Ester	0.5 lb ai/a	1 pt/a			A					
9 COC	1 % v/v	0.6 qt/a			A					
9 Abundit Extra	0.75 lb ae/a	32 oz/a			B					
9 N PAK AMS	2.5 % v/v	1.5 qt/a			B					
10 Instigate 5.25 oz						100	85	100	0	100
10 Rimsulfuron	0.218 oz ai/a	0.87 oz/a			A					
10 Mesotrione	2.18 oz ai/a	4.36 oz/a			A					
10 Cinch ATZ	2.75 lb ai/a	2 qt/a			A					
10 COC	1 % v/v	0.6 qt/a			A					
10 Abundit Extra	0.75 lb ae/a	32 oz/a			B					
10 N PAK AMS	2.5 % v/v	1.5 qt/a			B					
11 Instigate 5.25 oz						100	92	100	0	100
11 Rimsulfuron	0.218 oz ai/a	0.87 oz/a			A					
11 Mesotrione	2.18 oz ai/a	4.36 oz/a			A					
11 Cinch ATZ	2.75 lb ai/a	2 qt/a			A					
11 2,4-D Ester	0.5 lb ai/a	1 pt/a			A					
11 COC	1 % v/v	0.6 qt/a			A					
11 Abundit Extra	0.75 lb ae/a	32 oz/a			B					
11 N PAK AMS	2.5 % v/v	1.5 qt/a			B					
12 UTC						0	0	0	0	0
LSD (P=.05)						13.8	11.8	14.8t	0.0	12.3t
Standard Deviation						8.1	7.0	8.8t	0.0	7.3t
CV						9.85	8.64	11.17	0.0	9.17
Bartlett's X2						3.949	4.066	5.612	0.0	5.858
P(Bartlett's X2)						0.139	0.944	0.132	.	0.21
Skewness						-1.8027*	-2.7345*	-2.4495*	.	-2.6656*
Kurtosis						2.4178*	6.7833*	5.0451*	.	6.0696*
Replicate F						2.049	0.442	1.841	0.000	0.597
Replicate Prob(F)						0.1527	0.6485	0.1823	1.0000	0.5594
Treatment F						42.418	40.924	26.090	0.000	37.563
Treatment Prob(F)						0.0001	0.0001	0.0001	1.0000	0.0001

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Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	SETFA	AMBTR
Pest Scientific Name	Ambrosia trifida	Setaria faberi	Ambrosia trifida
Pest Name	Giant ragweed	Giant foxtail	Giant ragweed
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Rating Date	May-29-2014	Jul-7-2014	Jul-7-2014
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%		
Number of Subsamples	1	1	1
SE Group No.	14	15	16
Days After First/Last Applic.	35 35	74 28	74 28
Trt-Eval Interval	36 DA-A	28 DA-B	28 DA-B
Plant-Eval Interval	25 DP-1	64 DP-1	64 DP-1
Days After Emergence	10 DE-1	49 DE-1	49 DE-1
ARM Action Codes	ET12	AA	ET6
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Unit	Appl Code	14	15	16
1	Surestart II	1.56 lb ai/a		3 pt/a		A	73	98	88
1	Durango DMA	0.75 lb ae/a		1.5 pt/a		A			
1	2,4-D Amine	0.5 lb ai/a		1 pt/a		A			
1	N PAK AMS	2.5 % v/v		1.5 qt/a		A			
1	Durango DMA	0.75 lb ae/a		1.5 pt/a		B			
1	N PAK AMS	2.5 % v/v		1.5 qt/a		B			
2	Surestart II	1.56 lb ai/a		3 pt/a		A	67	92	85
2	Atrazine	1 lb ai/a		1 qt/a		A			
2	Durango DMA	0.75 lb ae/a		1.5 pt/a		A			
2	2,4-D Amine	0.5 lb ai/a		1 pt/a		A			
2	N PAK AMS	2.5 % v/v		1.5 qt/a		A			
2	Durango DMA	0.75 lb ae/a		1.5 pt/a		B			
2	N PAK AMS	2.5 % v/v		1.5 qt/a		B			
3	Roundup PowerMax	0.77 lb ae/a		22 oz/a		A	60	97	93
3	Clarity	0.25 lb ai/a		8 oz/a		A			
3	Fierce	0.143 lb ai/a		3 oz/a		A			
3	N PAK AMS	2.5 % v/v		1.5 qt/a		A			
3	Roundup PowerMax	0.77 lb ae/a		22 oz/a		B			
3	N PAK AMS	2.5 % v/v		1.5 qt/a		B			
4	Roundup PowerMax	0.77 lb ae/a		22 oz/a		A	73	98	92
4	Clarity	0.25 lb ai/a		8 oz/a		A			
4	Fierce	0.143 lb ai/a		3 oz/a		A			
4	AAtrex	1 lb ai/a		1 qt/a		A			
4	N PAK AMS	2.5 % v/v		1.5 qt/a		A			
4	Roundup PowerMax	0.77 lb ae/a		22 oz/a		B			
4	N PAK AMS	2.5 % v/v		1.5 qt/a		B			
5	Roundup PowerMax	0.77 lb ae/a		22 oz/a		A	58	95	84
5	Clarity	0.25 lb ai/a		8 oz/a		A			
5	Harness Xtra 5.6	2.45 lb ai/a		3.5 pt/a		A			
5	N PAK AMS	2.5 % v/v		1.5 qt/a		A			
5	Roundup PowerMax	0.77 lb ae/a		22 oz/a		B			
5	N PAK AMS	2.5 % v/v		1.5 qt/a		B			
6	Harrow	0.0234 lb ai/a		0.5 oz/a		A	65	83	20
6	Glyphos Xtra	0.75 lb ae/a		32 oz/a		A			
6	NIS	0.25 % v/v		4.8 oz/a		A			

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Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	SETFA	AMBTR
Pest Scientific Name	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>
Pest Name	Giant ragweed	Giant foxtail	Giant ragweed
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Rating Date	May-29-2014	Jul-7-2014	Jul-7-2014
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%		
Number of Subsamples	1	1	1
SE Group No.	14	15	16
Days After First/Last Applic.	35 35	74 28	74 28
Trt-Eval Interval	36 DA-A	28 DA-B	28 DA-B
Plant-Eval Interval	25 DP-1	64 DP-1	64 DP-1
Days After Emergence	10 DE-1	49 DE-1	49 DE-1
ARM Action Codes	ET12	AA	ET6
Number of Decimals	0	0	0

Trt Treatment No. Name	Rate	Other Rate	Other Rate	Appl Code	14	15	16
7 Basis	0.0234 lb ai/a	0.5 oz/a		A	67	72	0
7 Glyphos Xtra	0.75 lb ae/a	32 oz/a		A			
7 NIS	0.25 % v/v	4.8 oz/a		A			
8 Instigate 6 oz					88	94	89
8 Rimsulfuron	0.25 oz ai/a	1 oz/a		A			
8 Mesotrione	2.5 oz ai/a	5 oz/a		A			
8 Atrazine	1.5 lb ai/a	1.5 qt/a		A			
8 COC	1 % v/v	0.6 qt/a		A			
8 Abundit Extra	0.75 lb ae/a	32 oz/a		B			
8 N PAK AMS	2.5 % v/v	1.5 qt/a		B			
9 Instigate 6 oz					94	99	98
9 Rimsulfuron	0.25 oz ai/a	1 oz/a		A			
9 Mesotrione	2.5 oz ai/a	5 oz/a		A			
9 Atrazine	1.5 lb ai/a	1.5 qt/a		A			
9 2,4-D Ester	0.5 lb ai/a	1 pt/a		A			
9 COC	1 % v/v	0.6 qt/a		A			
9 Abundit Extra	0.75 lb ae/a	32 oz/a		B			
9 N PAK AMS	2.5 % v/v	1.5 qt/a		B			
10 Instigate 5.25 oz					82	100	92
10 Rimsulfuron	0.218 oz ai/a	0.87 oz/a		A			
10 Mesotrione	2.18 oz ai/a	4.36 oz/a		A			
10 Cinch ATZ	2.75 lb ai/a	2 qt/a		A			
10 COC	1 % v/v	0.6 qt/a		A			
10 Abundit Extra	0.75 lb ae/a	32 oz/a		B			
10 N PAK AMS	2.5 % v/v	1.5 qt/a		B			
11 Instigate 5.25 oz					83	99	93
11 Rimsulfuron	0.218 oz ai/a	0.87 oz/a		A			
11 Mesotrione	2.18 oz ai/a	4.36 oz/a		A			
11 Cinch ATZ	2.75 lb ai/a	2 qt/a		A			
11 2,4-D Ester	0.5 lb ai/a	1 pt/a		A			
11 COC	1 % v/v	0.6 qt/a		A			
11 Abundit Extra	0.75 lb ae/a	32 oz/a		B			
11 N PAK AMS	2.5 % v/v	1.5 qt/a		B			
12 UTC					0	0	0
LSD (P=.05)					17.7	10.0t	18.8
Standard Deviation					10.4	5.9t	11.1
CV					15.43	8.41	15.96
Bartlett's X2					9.406	14.577	32.416
P(Bartlett's X2)					0.494	0.148	0.001*
Skewness					-1.5913*	-2.3714*	-1.2601*
Kurtosis					2.4984*	5.1785*	-0.2453
Replicate F					1.675	1.258	1.527
Replicate Prob(F)					0.2104	0.3040	0.2394
Treatment F					15.958	47.432	35.946
Treatment Prob(F)					0.0001	0.0001	0.0001

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No-Tillage Weed Control in Corn I Valent, DOW, Dupont, Cheminova

Trial ID: 14NTC1 Location: Trial Year: 2014
Protocol ID: 14NTC1 Investigator: Dr. Mark M. Loux
Project ID: Study Director: Anthony Dobbels
Sponsor Contact: Various

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

STEME, Stellaria media, = US
LAMPU, Lamium purpureum, = US
VERAR, Veronica arvensis, = US
AMBTR, Ambrosia trifida, = US
RANAB, Ranunculus abortivus, = US
SETFA, Setaria faberi, = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

CONTRO = control / burndown or knockdown
PHYGEN = phytotoxicity - general / injury

Rating Unit

% = percent

Plant-Eval Interval

-3 DP-1 = 1 ZEAMX May-4-2014
12 DP-1 = 1 ZEAMX May-4-2014
25 DP-1 = 1 ZEAMX May-4-2014
64 DP-1 = 1 ZEAMX May-4-2014

ARM Action Codes

AA = Automatic arcsine square root % transformation